

## REMARKS/ ARGUMENTS

The foregoing amendment and the following arguments are provided to impart precision to the claims, by more particularly pointing out the invention, rather than to avoid prior art.

### 35 U.S.C. § 102(e) Rejections

Examiner rejected claims 1, 2, 4-20, 22-35 and 37-66 under 35 U.S.C. § 102(e) as being anticipated over U.S. Patent 6,088,370 (hereinafter "Bell").

"To anticipate a claims, the reference must teach every element of the claim. A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." (Manual of Patent Examining Procedures (MPEP) ¶ 2131.)

Independent claims 1, 16, 29, 30, 47, and 50 of the present application includes limitations not disclosed or taught by the Bell. As a result, the independent claims 1, 16, 29, 30, 47, and 50 are not anticipated by the Bell.

In particular, the independent claims include the limitation of an interface "between a memory control hub (MCH) and a input/output control hub (ICH)".

Bell, however, does not disclose an interface between a memory control hub (MCH) and a input/output control hub (ICH). Rather, Bell only discloses a bus system that provides "connections between a controller 115 . . . and bus expander bridges 117, 120, and 125." (Bell Col. 2, lns. 21-27).

More specifically, the examiner states equates the bus expander bridge 120 as shown in Bell to applicant's claimed input/output control hub (ICH).

Applicants respectfully disagree.

The bus expander bridge 120 shown and described in Bell, do not disclose applicants' claimed input/output control hub (ICH). As defined in applicants' detailed description, the ICH is a hub that is capable of supporting multiple different buses with separate protocols. For example, in one embodiment, as described in the description, the ICH, in one embodiment, may support Universal Serial Bus, as well as supporting Bus Mastering ID (BM-ID). (See application pg. 14, lines 1-10).

The expander bridge 120 as shown in Bell is different than the input/output control hub as claimed by applicant in that the expander bridge 120 only supports a single protocol. The expander bridges 120 is unable to accept/interconnect multiple different external buses with separate protocols. As a result, *multiple expander bridges need to be used to provide the function or service of the claimed input/output control hub.*

For example, see Figure 1 and accompanying description of Bell. As shown and described in Bell, expander bridge 120 is shown to interface with two external buses of the same protocol (e.g., PCI ). The disadvantages of using bridges that can only work with one type of external bus and support only one protocol, is that multiple expander bridges are then required to support multiple different protocols, rather than the claimed input/output control hub. As a result of the multiple hubs to support the different protocols, there is an increase

in the number of signal and data paths, compared to the input/output control hub interface with the MCH.

For example, as shown and described in Figure 1 of Bell, there are at least 4 separate interconnections between bridges and the controller 115, **resulting in at least four different 16 bit busses/interfaces to the controller 115.** To the contrary, applicant's claimed input/output control hub results in a simpler interconnection than the use of the multiple bridges as shown in Bell. By way of exemplary embodiment only, as shown in applicants' Figure 8 of applicants' detailed description, the interface of the input/output control hub to the MCH, includes the simple interface of only a 25 bit signal path (the actual size of an interface between an ICH and MCH may vary within the scope of the invention).

The examiner has further stated that applicants disclose an embodiment for the ICH to support "only" a single protocol, in addition to disclosing an embodiment of the ICH supporting multiple protocols: "[T]he specification also indicates that the hub interface agent, in another embodiment, does not implement separate internal pipes, so that a default Pipe ID can be used, thereby implying that only one type of bus can be supported as well." (Advisory Action mailed July 2, 2003).

Applicants respectfully disagree. The examiner can not disregard applicants' description of the claimed ICH as being able to support multiple buses with separate protocols. The claimed ICH is to be interpreted as being able to support multiple buses with separate protocols or support a single

protocol, which is different and distinct from the expander of Bell which only supports a single protocol.

Therefore, considering the expander bridge 120 disclosed in Bell is clearly distinct and separate from the claimed input/output control hub as claimed by applicant, Bell clearly does not anticipate applicants' independent claims.

In addition, applicants' remaining claims depend from at least one of the independent claims mentioned above. As a result of depending from one of the independent claim, the remaining claims include the distinguishing limitations discussed above, and are therefore also not anticipated by Bell.

### CONCLUSION

Applicants respectfully submit the present application is in condition for allowance. If the Examiner believes a telephone conference would expedite or assist in the allowance of the present application, the Examiner is invited to call John Ward at (408) 720-8300, x237.

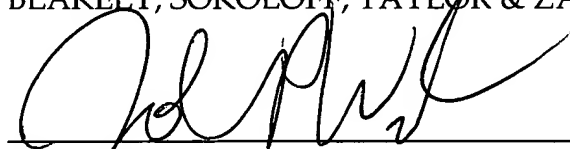
Authorization is hereby given to charge our Deposit Account No. 02-2666 for any charges that may be due.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN

Date: \_\_\_\_\_

10/2/03



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